

THE OFFICE ACTION

In the final Office Action issued on July 13, 2006, the Examiner rejected **claims 13, 26, 39 and 44** under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

The Examiner rejected **claims 1-7, 12-13, 27-33, 38, 39 and 45** under 35 U.S.C. §102(b) as being anticipated by WO 01/89001 to Srivastava et al. ("Srivastava"). The Examiner also rejected **claims 1-3, 5-8, 12-13, 27-29, 31-34, 38-39 and 45** as being anticipated by WO 02/11214 to Bokor ("Bokor"). The Examiner also rejected **claims 14-16, 18-21, 25 and 26** under 35 U.S.C. §103(a) as being unpatentable over Bokor in view of U.S. Published Patent Application Publication No. 2004/0051444 to Schaepkens et al. ("Schaepkens") and either 2002/0174794 to Lowden et al. ("Lowden") or EP0087745 to Wyner et al. ("Wyner"). The Examiner also rejected **claims 14-20, 25-16, 40 and 43** under 35 U.S.C. §103(a) as being unpatentable over Srivastava in view of Schaepkens and either Lowden or Wyner. **Claim 44** was rejected based on Srivastava in view of Applicants' admission. The Examiner indicated that **claims 9-11, 22-24, 35-37 and 41-42** contained allowable subject matter.

Claims 1-45 are pending in the application.

REMARKS

Amendments have been made to the claims to address the Examiner's objections to these. In light of these amendments and the following comments, Applicants respectfully request withdrawal of all rejections.

A. The Claims Satisfy §112

The Examiner rejected claims 13, 26, 39 and 44 under §112 as failing to comply with the written description requirement. Specifically, the Examiner rejected claims 13, 26 and 39 as reciting a group of phosphors that have not been distinguished in the specification as preferable over those originally included. The Applicants are somewhat confused by this rejection. The amendments to claims 13, 26, and 39 merely removed redundancies in the phosphor list. It did not add any additional phosphors to the list nor did it remove any. Rather, it simply removed phosphors that had been included more than once in the original claim. Thus,

Applicants submit that there has been no material change to the original list and request withdrawal of this rejection.

With regard to the Examiner's rejection of claim 44, Applicants are again at a loss as to what the Examiner specifically objects to. All three of the phosphors blended with the $(\text{Sr}, \text{Ba}, \text{Ca})_2\text{SiO}_4:\text{Eu}$ phosphor are listed in the list that starts on page 11 of the specification. The Examiner states that "the claimed phosphor composition comprising the specific combination of all four of the phosphors as recited in claim 44 has not been disclosed in the specification. What is disclosed is substantially broader than what is claimed here." However, Applicants submit that this is not a sufficient basis for presenting a §112 rejection. That is, while a claim cannot be broader than the original disclosure, it is perfectly acceptable if the specification is broader than that which is claimed. It is certainly acceptable for the Applicant to claim a specific phosphor composition based on the disclosure of a broader list without running afoul of §112. If the Examiner believes otherwise, Applicants invite the Examiner to provide support for her interpretation.

Furthermore, at least three of the four claimed phosphors in the specific blend, i.e. $(\text{Sr}, \text{Ba}, \text{Ca})_2\text{SiO}_4:\text{Eu}$; $(\text{Ba}, \text{Sr}, \text{Ca})_5(\text{PO}_4)_3(\text{Cl}, \text{F}, \text{Br}, \text{OH}):\text{Eu}^{2+}, \text{Mn}^{2+}$; and, $\text{Mg}_4\text{FGeO}_6:\text{Mn}^{4+}$ are listed in original claim 40 as being preferred phosphors. Thus, despite the Examiner's position, these phosphors have been distinguished as being preferably included in a phosphor blend. Withdrawal of these rejections is requested.

B. The Claims are Patentable Over Srivastava

The Examiner rejected claims 1-7, 12-13, 27-33, 38, 39 and 45 as being anticipated by Srivastava. Applicants respectfully traverse.

As amended, claim 1 now recites that the phosphor composition includes $(\text{Sr}, \text{Ba}, \text{Ca})_2\text{SiO}_4:\text{Eu}$, one or more garnet phosphors having the general formula $(\text{Y}, \text{Gd}, \text{La}, \text{Lu}, \text{T}, \text{Pr}, \text{Sm})_3(\text{Al}, \text{Ga}, \text{In})_5\text{O}_{12}:\text{Ce}$, and at least one of $(\text{Sr}, \text{Mg}, \text{Ca}, \text{Ba}, \text{Zn})_2\text{P}_2\text{O}_7:\text{Eu}, \text{Mn}$; $(\text{Ca}, \text{Sr}, \text{Ba}, \text{Mg})_5(\text{PO}_4)_3(\text{Cl}, \text{F}, \text{OH}):\text{Eu}, \text{Mn}$; $(\text{Sr}, \text{Ba}, \text{Ca})\text{MgAl}_{10}\text{O}_{17}:\text{Eu}, \text{Mn}$; and/or $\text{Mg}_4\text{FGeO}_6:\text{Mn}^{4+}$. This is the same recitation as in original claim 40. Srivastava fails to disclose or suggest such a phosphor blend. Thus, Applicants request withdrawal of this rejection.

C. The Claims are Patentable Over Bokor

The Examiner rejected claims 1-3, 5-8, 12-13, 27-29, 31-34, 38-39 and 45 as being anticipated by Bokor. Applicants respectfully traverse.

The Examiner rejected the claims based on her assertion that Bokor discloses a white light emitting device including a semiconductor light emitter and a phosphor composition $(\text{Sr,Ba,Ca})_2\text{SiO}_4\text{:Eu}$. Specifically, the Examiner states that the phosphor is found in item 14 of table 4 of Bokor.

However, Applicants would like to point out that the phosphor recited in item 14 of table 4 of Bokor is actually $(\text{Sr,Ba})\text{SiO}_4\text{:Eu}$, NOT $(\text{Sr,Ba,Ca})_2\text{SiO}_4\text{:Eu}$, i.e. it does not have the subscript "2" after the alkaline earth metals. Thus, because Bokor fails to disclose the claimed phosphor, it does not anticipate the present claims.

Based on the above, Applicants respectfully request withdrawal of this rejection.

D. The Claims are Patentable Over Bokor in view of either Schaepkens and either Lowden or Wyner

The Examiner rejected claims 14-16, 18-21, 25 and 26 as being unpatentable over Bokor in view of Schaepkens and either Lowden or Wyner. Applicants respectfully traverse.

The Examiner cites Schaepkens and Lowden and Wyner as teaching the use a magnesium fluorogermanate phosphor in a lighting device. Even assuming this to be true and even assuming the propriety of combining Bokor with these other references, such a combination would still not disclose or suggest all of the limitations of the present claims. Specifically, such a combination would still not disclose the use of the $(\text{Sr,Ba,Ca})_2\text{SiO}_4\text{:Eu}$ phosphor, since, as detailed above, Bokor only discloses the use $(\text{Sr,Br})\text{SiO}_4\text{:Eu}$. Based on this, Applicants respectfully request withdrawal of this rejection.

E. The Claims are Patentable Over Srivastava in view of Schaepkens and either Lowden or Wyner

The Examiner rejected claims 14-20, 25-16, 40 and 43 as being unpatentable over Srivastava in view of Schaepkens and either Lowden or Wyner. Applicants respectfully traverse.

The Examiner cites Schaepkens, Lowden and Wyner as disclosing the use of both a garnet phosphor and a magnesium fluorogermanate phosphor, specifically

the one claimed in the present invention and that it would have been obvious to include these in the invention of Srivastava to produce white light.

However, as Srivastava discloses, the phosphor blend therein is directed to a very specific blend of phosphors, including a first phosphor having an emission peak of from 575-620 nm, a second phosphor having an emission peak of from 495-550 nm, and a third phosphor having an emission peak of from 420-480 nm. The Examiner has failed to make a prima facie case of obviousness because it is unclear whether the both the specific garnet and magnesium fluorogermanate phosphors as disclosed in these other references emit in this range. Furthermore, just because it is possible for specific phosphors to be used in a blend does not mean that such phosphors are suggested. Rather, there must be some reason why one skilled in the art would use these phosphors over other suitable phosphors. Here, there is no such motivation or suggestion. Withdrawal of this rejection is requested.

F. The Claims are Patentable Over Srivastava in view of Applicants' Admission

The Examiner rejected claim 44 based on Srivastava in view of Applicants admission. Allegedly, the examiner has taken the position that because both $(\text{Ba,Sr,Ca})_5(\text{PO}_4)_3(\text{Cl,F,Br,OH}):\text{Eu}^{2+},\text{Mn}^{2+},\text{Sb}^{3+}$; $\text{Sr}_4\text{Al}_{14}\text{O}_{25}:\text{Eu}^{2+}$ are listed on page 11 of the specification, this is somehow an "admission" that they are equivalents. This is certainly not the case. Merely, these phosphors are both suitable for use, but their emission characteristics can be quite different. Thus, they are not equivalents and one would not suggest using the other. Withdrawal of this rejection is requested.

CONCLUSION

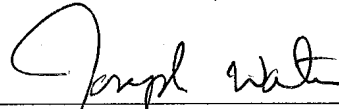
It is respectfully submitted that the subject application is now in better condition for examination.

If any fee is due in conjunction with this filing, please charge any and all fees to Deposit Account No. 06-0308.

Respectfully submitted,

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Oct 13, 2006
Date



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